

Title (en)
DOUBLE FLANK DELASH GEAR MECHANISM

Title (de)
DOPPELFLANKENGETRIEBEMECHANISMUS ZUR VERMEIDUNG VON SPIEL

Title (fr)
MECANISME D'ENGRENAGE DOUBLE FLANC A SUPPRESSION DE JEU

Publication
EP 1638724 A2 20060329 (EN)

Application
EP 04755331 A 20040615

Priority

- US 2004019089 W 20040615
- US 47916703 P 20030616
- US 47975103 P 20030618

Abstract (en)
[origin: WO2004113006A2] A gear arrangement includes a first section having a first plurality of teeth (26) and at least a portion of the first section is made of a compliant material. There is also a second section having a second plurality of teeth (24). The second section is made of a stiff material. The first section is arranged axially adjacent to the second section and each of the first plurality of teeth (26) has a tooth flank (44a, 44b) that changes axially across the tooth flank (44a, 44b). A method for manufacturing a gear arrangement includes fabricating a first gear (14), which includes a first plurality of teeth (26), and a bearing (18) from a compliant material. The method also includes mounting a second gear (12), which includes a second plurality of teeth (24), to the bearing (18), aligning the first plurality of teeth (26) with the second plurality of teeth (24), and coupling the first gear (14) with the second gear (12).

IPC 1-7
B23F 1/00

IPC 8 full level
B21D 53/28 (2006.01); **B23P 15/14** (2006.01); **F16H 55/06** (2006.01); **F16H 55/12** (2006.01); **F16H 55/17** (2006.01); **F16H 55/18** (2006.01)

CPC (source: EP US)
B23P 15/14 (2013.01 - EP US); **F16H 55/06** (2013.01 - EP US); **F16H 55/17** (2013.01 - EP US); **F16H 55/18** (2013.01 - EP US); **F16H 2055/185** (2013.01 - EP US); **Y10T 74/19623** (2015.01 - EP US); **Y10T 74/19898** (2015.01 - EP US); **Y10T 74/19907** (2015.01 - EP US)

Cited by
CN106286791A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2004113006 A2 20041229; WO 2004113006 A3 20060526; EP 1638724 A2 20060329; EP 1638724 A4 20071114; US 2004253912 A1 20041216; US 7383750 B2 20080610

DOCDB simple family (application)
US 2004019089 W 20040615; EP 04755331 A 20040615; US 86861204 A 20040615